In the claims:

Please cancel claims 1-46

Please add the following claims:

between at least one mobile telephone and a satellite relay station comprising:

a transmitter that transmits constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

a receiver that receives linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel.

48. (New Claim) The communication system of claim 47 that communicates signal bursts between at least one mobile telephone and a satellite relay station comprising:

a transmitter that transmits constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

a receiver that receives linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel, wherein said constant envelope modulated signal is a GMSK modulated signal.

49. (New Claim) The communication system of claim 47 that communicates signal bursts between at least one mobile telephone and a satellite relay station comprising:

a transmitter that transmits constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

a receiver that receives linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel, wherein

said linearly modulated signal is a OQPSK signal.

cont



,

50 (New Claim) The communication system of claim 47 that communicates signal bursts between at least one mobile telephone and a satellite relay station comprising:

a transmitter that transmits constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

a receiver that receives linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel, wherein

the signal bursts are TDMA signal bursts.

51. (New Claim) A method of communicating signal bursts between at least one mobile telephone and a satellite relay station comprising the steps of:

transmitting constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

receiving linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel.

52. (New Claim) The method of claim 50 communicating signal bursts between at least one mobile telephone and a satellite relay station comprising the steps of:

transmitting constant envelop modulated signal bursts from the mobile to the satellite relay station over an aplink RF channel; and

receiving linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel, wherein

said constant envelope modulated signal is a GMSK modulated signal.

53. (New Claim) The method of claim 50 communicating signal bursts between at least one mobile telephone and a satellite relay station comprising the steps of:

transmitting constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

receiving linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel, wherein



said linearly modulated signal is a OQPSK signal.

54. (New Claim) The method of claim 50 communicating signal bursts between at least one mobile telephone and a satellite relay station comprising the steps of:

transmitting constant envelop modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel; and

receiving linearly modulated signal bursts from the satellite relay station at the mobile telephone over a downlink RF channel, wherein

the signal bursts are TDMA signal bursts.

55. (New Claim) In a communication system that communicate signal bursts between mobile telephones and a satellite relay station over uplink and downlink radio frequency (RF) channels, a mobile telephone comprising:

a transmitter for transmitting a constant envelop modulated signal to the satellite relay station over an uplink RF channel; and

a receiver for receiving a linearly modulated signal from the satellite relay station over a downlink RF channel.

56. (New Claim) The mobile telephone of claim 55 that communicate signal bursts between mobile telephones and a satellite relay station over uplink and downlink radio frequency (RF) channels, a mobile telephone comprising:

a transmitter for transmitting a constant envelop modulated signal to the satellite relay station over an uplink RF channel; and

a receiver for receiving a linearly modulated signal from the satellite relay station over a downlink RF channel, wherein

said constant envelope modulated signal is a GMSK modulated signal.